

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Rakan C. Chabaan

For : H-INFINITY CONTROL AND GAIN SCHEDULING METHOD FOR
ELECTRIC POWER ASSIST STEERING SYSTEM

Mail Stop Patent Application
Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.97(b)

Pursuant to 37 CFR §§1.56 and 1.97(b), Applicant brings to the attention of the Examiner the documents listed on the attached Form PTO-1449, which are of record in related Application Serial No. 10/012,060. This Information Disclosure Statement is being filed within three months of the filing date of the above-referenced application.

Copies of the listed documents are submitted herewith along with Form PTO-1449. Applicant respectfully requests that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant reserves the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicant : Rakan C. Chabaan
For : H-INFINITY CONTROL AND GAIN SCHEDULING METHOD FOR
ELECTRIC POWER ASSIST STEERING SYSTEM
Page : 2

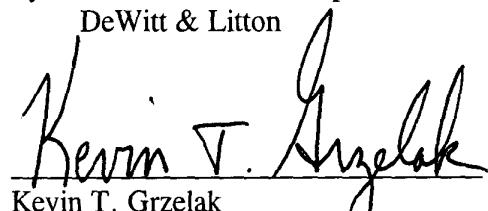
Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-1510.

Respectfully submitted,

RAKAN C. CHABAAN

By: Price, Heneveld, Cooper,
DeWitt & Litton



September 24, 2003
Date

Kevin T. Grzelak
Registration No. 35 169
695 Kenmoor, S.E.
Post Office Box 2567
Grand Rapids, MI 49501
(616) 949-9610

KTG/jrb

FORM PTO-1449 (Rev. 2-32)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 81090754	SERIAL NO.
		INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT Rakan C. Chabaan	
				FILING DATE	GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6 2 5 0 4 1 9	06/26/01	Chabaan et al.	180	443	
	6 1 4 8 9 4 9	11/21/00	Kobayashi et al.	180	446	
	5 9 0 8 4 5 7	06/01/99	Higashira et al.	701	41	
	5 8 6 1 7 2 5	01/19/99	Endo et al.	318	434	
	5 8 5 9 7 7 4	01/12/99	Kuzuya et al.	364	176	
	5 8 5 7 4 4 3	01/12/99	Kono et al.	123	339.2	
	5 8 3 6 4 1 8	11/17/98	Kim	180	422	
	5 8 1 9 7 1 4	10/13/98	Bush et al.	123	673	
	5 8 0 9 4 3 8	09/15/98	Noro et al.	701	41	
	5 7 3 2 3 7 3	03/24/98	Endo	701	42	
	5 6 9 7 8 6 7	12/16/97	Kono et al.	477	176	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	1 1 2 5 8 2 3	08/22/2001	EPC				

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	"Vehicle Dynamics and Control Synthesis for Four-Wheel Steering Passenger Cars," by You et al., December 1998, pages 449-461.
	"Electric Power Steering with H-Infinity Control Designed to Obtain Road Information," by N. Sugitani, Y. Fujiwara, K. Uchida, and M. Fujita, Proc. Of the ACC, Albuquerque, New Mexico, June 1997, 5 pages.
	"Power Steering 'Road Feel,'" by F. J. Adams, SAE Paper 8300998, 1983, 9 pages.
	"Analysis of Stiffness and Feel for a Power-Assisted Rack and Pinion Steering Gear," by J. Baxter, SEA paper 880706, 1998, 7 pages.
	"Control and Steering Feel Issues in the Design of an Electric Power Steering System," by A. Zaremba, M. Liubakka, and R. Stuntz, Proc. Of the ACC, 1998, 5 pages.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Rev. 2-32)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 201-0252 (FOR25 P-343)	SERIAL NO.
		INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT Rakan C. Chabaan	
				FILING DATE	GROUP

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5 6 9 0 0 8 7	11/25/97	Schumacher et al.	123	675	
	5 6 4 2 7 2 2	07/01/97	Schumacher et al.	123	673	
	5 6 2 7 7 5 0	05/06/97	Kono et al.	364	424	
	5 6 3 1 5 2 9	05/20/97	Shimizu et al.	318	432	
	H 1 4 1 0	01/03/95	Hartley	364	148	
	5 2 0 2 8 3 0	04/13/93	Tsurumiya et al.	364	424	
	5 1 9 8 9 8 1	03/30/93	Collier-Hallman et al.	364	424	
	5 0 3 8 2 6 9	08/06/91	Grimble et al.	364	148	
	4 8 7 1 0 3 9	10/03/89	Daido et al.	180	79	
	4 8 4 0 3 8 9	06/20/89	Kawabe et al.	280	91	
	4 7 0 3 8 2 1	11/03/87	Shimizu	180	79	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

	"Vibration Control Based on Dynamic Compensation in an Electric Power Steering System," by A. Zaremba, M. Liubakka, and R. Stuntz, Prep. Of the Int. Conf. On Control of Oscillations and Chaos, St. Petersburg, Vol. 3, 1997, pages 453-456.
	"Dynamic Analysis and Stability of a Power Assist Steering System," by A. Zaremba and R. Davis, Proc. Of the ACC, Seattle, Washington, June 1995, pages 4253-4257.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO-1449 [6-4])